

CCNA/CCDA – 24hrs

Higher Certificate in Cisco CCNA+CCDA Network Engineer

課程簡介

Cisco Systems 是全球最大的網絡設備生產商，全球電訊公司、銀行、企業、大學和政府機構的網絡設備，無一不採用 Cisco 的產品。而互聯網絕大部份的基礎設備更是採用 Cisco 的產品及技術，根據數字顯示，互聯網上大約 88% 的路由器 (Router) 均來自 Cisco Systems。

由於 Cisco 的 Router 及 Switch 等設備與一般電腦系統操作不相同，故此管理此等設備，便成爲一門專門的學問，透過這課程，學員將學習到網絡的運作原理、交換器及路由器的基本操作，除了理論外，學員更可親身使用真正的路由器上課，絕不是一般培訓中心可比擬。修畢課程後，學員更可考取 Cisco 相關的證書，包括 Cisco Certified Network Associate (CCNA)。

課程目標

本課程針對初級電腦網絡從業員而設，課程將教授學員電腦通訊協定標準，如 OSI model、TCP/IP、LAN/WAN 的設定及分別、Router 及 Switch 的管理及設定等知識。修畢課程學員可學懂建立簡單的以 Cisco 器材爲主的 LAN 或 WAN，並可考取 Cisco 所頒授的國際認證 Cisco Certified Network Associate (CCNA) 及 Cisco Certified Design Associate (CCDA)，藉此認證學員的網絡知識。

課程內容

Planning & Designing

- ◇ Design a simple LAN using Cisco Technology
- ◇ Design an IP addressing scheme to meet design requirements
- ◇ Select an appropriate routing protocol based on user requirements
- ◇ Design a simple internetwork using Cisco technology
- ◇ Develop an access list to meet user specifications
- ◇ Choose WAN services to meet customer requirements

Implementation & Operation

- ◇ Configure routing protocols given user requirements
- ◇ Configure IP addresses, subnet masks, and gateway addresses on routers and hosts
- ◇ Configure a router for additional administrative functionality
- ◇ Configure a switch with VLANs and inter-switch communication
- ◇ Implement a LAN
- ◇ Customize a switch configuration to meet specified network requirements
- ◇ Manage system image and device configuration files
- ◇ Perform an initial configuration on a router
- ◇ Perform an initial configuration on a switch
- ◇ Implement access lists
- ◇ Implement simple WAN protocols

Troubleshooting

- ◇ Utilize the OSI model as a guide for systematic network troubleshooting
- ◇ Perform LAN and VLAN troubleshooting
- ◇ Troubleshoot routing protocols
- ◇ Troubleshoot IP addressing and host configuration
- ◇ Troubleshoot a device as part of a working network
- ◇ Troubleshoot an access list
- ◇ Perform simple WAN troubleshooting Technology
- ◇ Describe network communications using layered models
- ◇ Describe the Spanning Tree process
- ◇ Compare and contrast key characteristics of LAN environments
- ◇ Evaluate the characteristics of routing protocols
- ◇ Evaluate TCP/IP communication process and its associated protocols
- ◇ Describe the components of network devices
- ◇ Evaluate rules for packet control
- ◇ Evaluate key characteristics of WANs

Technology

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